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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,042	09/25/2000	Christoph Widmer	32992	2828

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EXAMINER

MICHALSKI, JUSTIN I

ART UNIT	PAPER NUMBER
2644	11

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/669,042

Examiner

Justin Michalski

Applicant(s)

WIDMER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claim 1 has been cancelled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2-5, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (US Patent 4,311,206).

Regarding Claim 8, Johnson discloses a hearing device (Figures 2 and 5) comprising at least one of an acoustical/electrical converter (Microphone disclosed Column 3, line 3) and an electrical/acoustical (Speaker disclosed Column 3, line 4) converter respectively with an acoustical input or output (microphone or speaker), said input or output respectively being linked to a coupling opening (opening 46) at the outer surface of said device via a channel (channel 54), at least a part of said outer surface of said device being formed by a one-part shell of said device (shell 42) defining an inner space (inner volume 54), said channel being provided within and along said part of said shell and being formed within the material of said shell.

Regarding Claim 9, Johnson discloses a hearing device (Figures 2 and 5) comprising: a one-part shell forming at least a portion of an outer surface of said device (shell 42), said shell defining an interior space of said device (inner volume 54), said

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shell forming a channel out of the material of said shell (54), said channel being formed within and along said shell; and at least one of an acoustical/electrical converter (Microphone disclosed Column 3, line 3) and an electrical/acoustical converter (Speaker disclosed Column 3, line 4) including an acoustical input or output (microphone or speaker), respectively, wherein said input or output is acoustically linked to a coupling opening (opening 46) via said channel (54).

Regarding Claim 10, Johnson discloses a hearing device (Figure 2 and 5) comprising: a one-part shell (shell 42) forming at least a portion of an outer surface of said device, said shell defining an interior space of said device (inner volume 54), said shell forming a channel (54) out of the material of said shell, said channel being formed within and along said shell and, over at least a substantial segment of its length, said channel running essentially parallel to said outer surface (Figure 6 discloses channel running essentially parallel to outer surface of shell); and at least one of an acoustical/electrical converter (Microphone disclosed Column 3, line 3) and an electrical/acoustical converter (Speaker disclosed Column 3, line 4) including an acoustical input or output (microphone or speaker), respectively, wherein said input or output is acoustically linked to a coupling opening via said channel (54), and further wherein said channel is tuned to have specific acoustical characteristics (Johnson discloses inner chamber is designed to resonate at selected frequencies (i.e. specific acoustical characteristics) when energy is applied) (Column 1, lines 40-48).

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Regarding Claim 2, Johnson further discloses the device characterized in that over its length, the channel features varying cross-sectional dimensions or shapes (Figure 5 discloses varying cross section).

Regarding Claim 3, Johnson further discloses a matching stub line (tubular insert 52) serving for the tuning of the acoustic transmission properties between the coupling opening and the output (Column 3, lines 30-48) extends into said channel and is itself bounded by the material of the shell (42).

Regarding Claim 4, Johnson further discloses over at least a substantial segment of its length, the channel extends essentially parallel to the outer surface of the device (Figure 6 discloses the channel (54) running essentially parallel to outer surface of shell).

Regarding Claim 5, Johnson further discloses the device is a custom-molded hearing aid (Column 3, lines 18-23).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson as applied to claims 8 or 9 above in view of French (US Patent 1,830,198). Johnson discloses a device as stated above apropos of Claims 8 and 9. Johnson discloses the

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device as a custom-molded hearing aid and to be used in-the-ear (Column 3, lines 18-23 and Column 1, lines 56-60) but does not disclose the channel as part of a venting system for the eardrum. French discloses an ear receiver nipple (Figures 4 and 5) including a channel (channel G) for passing acoustic energy. French discloses a venting system comprising channels G and M to keep pressure from building up in the ear channel (Page 1, Line 62-72). French also teaches a device lacking a venting system would cause irregular compression of the air in the ear channel preventing proper reception and interpretation of auditory sounds (Page 1, Lines 53-56). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the channel as part of a venting system for the ear drum with the hearing aid disclosed by Johnson in order to keep pressure from building up in the ear channel and allowing proper reception.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson as applied to claims 8 and 9 in view of Ward (US Patent 4,811,402). Johnson discloses a device as stated apropos of claims 8 and 9 above but does not disclose another channel that extends in parallel for at least a certain segment. Ward discloses a hearing aid (Figure 2) with two channels (15 and 19). Figure 2 further shows channels 19 and 15 parallel for a segment on the inner ear (left) side of the device. Channel 15 conducts sound from transducer 13 and channel 19 is a vent which is commonly found in such devices to allow for equalization of pressure and minimize discomfort to the wearer (Column 7, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include another channel in

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order to allow for equalization of pressure and minimize discomfort to the wearer as taught by Ward.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (703)305-5598. The examiner can normally be reached on 8 Hours, 5 day/week.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Isen can be reached on (703)305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM


XU MEI
PRIMARY EXAMINER